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Report of the World Bank on measures to improve the effectiveness of the International Comparison Programme

Note by the Secretary-General

1. The Secretary-General has the honour to transmit to the Statistical Commission the report of the World Bank on measures to improve the effectiveness of the International Comparison Programme, which is contained in the annex. The report is transmitted to the Commission in accordance with the request of the Commission at its thirtieth session.[1]

Action to be taken by the Commission

2. The Commission is requested to review the work undertaken and the further steps proposed.

Notes

[1] See *Official Records of the Economic and Social Council, 1999, Supplement No. 4* (E/1999/24), chap. I.B.

* E/CN.3/2000/1.

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Annex

Report of the World Bank on measures to improve the effectiveness of the International Comparison Programme

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I. Background

1. The present report is a follow-up to the evaluation of the International Comparison Programme (ICP) prepared by Mr. Jacob Ryten under the sponsorship of the World Bank, the International Monetary Fund (IMF) and the United Nations (E/CN.3/1999/8) and the subsequent recommendations of the Statistical Commission outlined in the report of the Commission at its thirtieth session.[a] It starts with a brief review of the objectives of the organizational structure and the output of ICP; and then highlights areas where significant progress has been made in addressing issues underlined in the Ryten report as needing immediate attention, flags areas where further progress remains to be made and outlines practical steps towards addressing the outstanding issues.

II. International Comparison Programme (ICP)

2. The main objective of ICP is to provide purchasing power parity (PPP) statistics that allow cross-country comparisons of gross domestic product (GDP) and its sub-aggregates in real terms. By establishing purchasing power equivalence, PPP conversions allow cross-country comparisons of economic aggregates on the basis of volume, free of price and exchange-rate distortions.

3. The potential uses of ICP data are not limited to international comparisons. ICP makes available detailed and comparative price data that are important to policy makers at both national and regional levels. Along with the level and growth of incomes and output, relative price differences lie at the core of resource allocation questions. They exert a dominant influence over issues related to household capabilities to satisfy personal welfare needs. Differences in prices between areas and regions in the same country, as well as between countries, and the rates of change in these prices directly impact the varied socio-economic circumstances of different groups and their behaviour. ICP's survey framework, its detailed specification of individual items and its classification of these items into policy-relevant categories also contribute greatly to national statistical capacity-building.

A. Demand for ICP data

4. ICP data are vital for a wide range of important policy-related economic analyses. Much of this is central to the fundamental roles of different international agencies. For example, IMF uses PPP-adjusted GDP in its *World Economic Outlook* to estimate regional shares of world GDP and to compute weighted averages of regional growth rates. PPP-adjusted GDP per capita estimates also constitute an integral part of the United Nations Development Programme (UNDP) Human Development Index (HDI) and the World Bank's $1 per head per day international poverty threshold.

5. Because most countries have intensive economic interactions within their own regions and belong to one or more economic communities, comparative data about their neighbours can be most helpful. With the data that ICP regional comparisons make available, countries are better able to assess their comparative advantages. New regional initiatives, such as the Cross Border Initiative (CBI) in Africa, and the development of the Free Trade Area of the Americas (FTAA) create more demand for ICP data.

6. The methodology used in ICP can also be adopted for compiling more accurate price statistics for comparison at the national level. (For example China has used the ICP methodology to compare economic disparities across six regions.) The detailed classification of basic prices and expenditure shares permit country-level economic analysis of such issues of current concern as regional poverty incidence, regional wage differentials and exchange-rate policies.

7. ICP is also a vehicle for statistical capacity-building. An independent evaluation of the African 1993 ICP exercise,[b] for example, suggested that "the ICP work has led to improved consumer price indices (CPIs) in many countries in the form of enlarged product baskets, geographically and socially extended coverage, and shortened publication timetables. It has also stimulated the development of price indices for investment goods and, which is especially important, enhanced the general level of methodological knowledge in countries". The report goes on to say that, with appropriate measures, the statistical infrastructure put in place by ICP can provide the basis for a gradual development of national account and price statistics in African countries.

8. In the research arena, ICP continues to be an authoritative source. PPP data are commonly used to explain comparative growth rates, competitiveness in world trade and patterns of specialization among industries. Demand has also grown in the private sector. Multinational corporations are increasingly using PPP-adjusted gross national product (GNP) or GDP per capita estimates to compare market sizes and to assess differences in cost of production across countries.

B. Regional comparisons and global coordination of ICP

9. ICP is a complex worldwide data-collection, compilation and dissemination exercise. The comparisons are first carried out in regions (Asia, Africa, Latin America, the Middle East and the Caribbean) and country groups (Organisation for Economic Cooperation and Development (OECD)). Harmonized price surveys of goods and services typical of each region's consumption patterns are conducted by participating countries within their respective regions. Regional surveys are coordinated by regional agencies, while the overall global coordination of regional surveys is carried out by a global coordinator. Each region calculates its regional PPPs and publishes its findings in a report. After the regional results are finalized, the global coordinator links regional results, produces global PPPs and prepares a report.

10. In the first three global comparisons (1975, 1980 and 1985), the United Nations was instrumental in planning and coordinating ICP. Because of financial problems, the United Nations relinquished its global coordinator role in 1993. Subsequently, the main burden of global coordination fell on the World Bank. The World Bank was able to revitalize the 1993 round of surveys and bring it to closure. This was made possible with the help of a network of international, regional and national partners. The World Bank, IMF and the European Bank for Reconstruction and Development (EBRD) contributed to the ICP Trust Fund, which was used to help finance regional workshops, support surveys in some countries and coordinate the global work. The Statistical Office of the European Communities (Eurostat) and European Union (EU) countries financed the African comparison. OECD supported regional comparisons in Europe Group II and Group III countries. The Economic and Social Commission for Asia and the Pacific (ESCAP), Japan and the Asian Development Bank covered the Asian region. The Economic Commission for Latin America and the Caribbean (ECLAC), the Economic and Social Commission for Western Asia (ESCWA) and the Caribbean Community (CARICOM) coordinated work in their respective regions with financial support from the ICP Trust Fund.

11. The 1993 round brought a total of 118 countries into the ICP fold, covering all regions of the world for the first time. This success was due partly to the introduction of cost-effective and simplified surveys under the reduced information approach (RIA), which permitted resource-poor countries to participate in the programme.

C. Independent evaluation of ICP

12. In the last three years, three independent evaluations of ICP were conducted. The first report, prepared by Messrs. Raimundo Fombellida and Seppo Varjonen (1996), focused on the African 1993 comparison. This was followed by the evaluation by Mr. Ian Castles of the OECD programme (1997).[c] The third evaluation, sponsored by IMF, the United Nations Statistics Division and the World Bank (1999), and conducted by Mr. Jacob Ryten (E/CN.3/1999/8), had a broader mandate with respect to covering all regional comparisons. The three evaluations shared common objectives: (a) to assess the demand for and the uses of PPP data, (b) to identify weak areas of the programme, and (c) to recommend strategies to strengthen it. The three independent reports agreed on most issues and all confirmed the value of PPP data — the estimation of which is the primary objective of ICP — for a wide range of policy-relevant economic analyses.

13. The Ryten report observed that the most serious problem facing ICP was the lack of credibility of its outputs, particularly at the detailed level. Lack of credibility was linked to a "data breeding" problem, which included poor management and supervision of country-level data collection, data editing and processing, and the lack of coordination between national statistical offices and regional coordinators. These problems were, in turn, attributed to insufficient funding and absence of a credible international coordinator.

14. With the objective of filling the "credibility gap", promoting the value of PPP statistics in the eyes of users and strengthening the coordination between national and international bodies, the Ryten report made some valuable recommendations, *inter alia*, on: (a) appointment of a world coordinator to provide leadership; (b) establishment of a consortium of international agencies to mobilize resources needed to strengthen the programme; and (c) based on a variety of ideas, strengthening data collection and improving the compilation and dissemination processes.

15. The Statistical Commission at its thirtieth session discussed the Ryten report. The Commission accepted the report and its recommendations. The Commission requested a group composed of IMF, the World Bank and the United Nations Statistics Division to prepare an implementation plan laying out practical steps towards developing a comprehensive solution.

III. Moving forward

16. Important steps have been taken since the thirtieth session of the Statistical Commission. The four most noteworthy are: preparation of the forthcoming ICP global report and the accompanying ICP compact disk read-only memory (CD-ROM); the development of new data-capture and data-processing software; a regional ICP workshop for the Commonwealth of Independent States (CIS); and progress in the integration of the World Bank and University of Pennsylvania Penn World Tables (PWT) databases.

A. ICP global report

17. Work is in progress at the World Bank to publish a global report on the latest ICP round with an accompanying CD-ROM containing detailed PPP data for 120 benchmark countries — the largest number ever in any round of surveys. The global report will provide references to seven regional comparisons from which the international comparison was drawn. Along with an explanation of the global framework and its regional organizational arrangement, the report will include concise methodological notes on how each regional comparison was aggregated and how the comparisons were brought together within a consistent and readily comparable framework. The report and the accompanying CD-ROM are scheduled for publication in May 2000.

18. By drawing attention to the strengths and weaknesses of the underlying data, the report aims to make both the process and the results of the programme transparent. The report will provide readers with information on the uses and limitations of the data to facilitate the appropriate application of ICP data. The accompanying CD-ROM will present results of seven different regional comparisons as well as the globalized results.

B. Price collection software

19. In ICP work, the most difficult tasks are data collection, data editing and national average prices calculation. Given the criticisms of the Ryten report, this issue has been accorded high priority as one means of improving the coherence and consistency of the ICP price data. Price data capture software is under development at the World Bank to help alleviate the data problems highlighted by the Ryten report. In addition to capturing data, the software will provide facilities for verification of product codes, compatibility and consistency of values in specific fields. The software will be fully integrated with the ICP ToolPak, data-processing software developed for PPP aggregation.

20. The integrated platform, which simplifies data collection, verification and PPP aggregation, is intended to facilitate and improve processes related to three key areas of data development. First, the software will allow data-editing work to be undertaken at the national level. This will significantly reduce the data-processing time at the regional coordination centre and thereby shorten the duration of the regional comparison. This will, in turn, help alleviate the lack-of-timeliness problem. Second, it will benefit both CPI and ICP price collection and facilitate the integration of the two. Third, by bringing the input data and the resulting PPP estimates together in the same package, the software will enhance transparency. Plans are under way to pilot the software for CPI work in two African countries, Mali and Burkina Faso.

C. Technical seminars and workshops

21. To improve country capacity and awareness, technical seminars and workshops are regularly organized. They are designed specifically to strengthen the reliability of country-level data-collection and -processing work. In July 1999, a CIS regional workshop was organized jointly by OECD, CIS, and the Russian Federation's State Statistical Committee (Goskomstat). Although the main focus of the workshop was to discuss the results of the 1996 regional comparison, data-gathering and -processing issues were discussed at great length.

D. Integration of the World Bank and Penn World Tables (PWT) databases

22. The World Development Indicators (WDI) of the World Bank and the Penn World Tables (PWT) of the University of Pennsylvania are the two most widely used sources of PPP data. Although the raw data are the same, the fact that the two institutions apply different methods to extrapolate ICP benchmark estimates to non-benchmarks, results in different estimates of PPPs and causes confusion among users.

23. At the initiative of Professors Summers and Heston of the University of Pennsylvania, IMF and the World Bank agreed that the Bank, because of its long history of involvement and expertise in PPP work, would manage an integrated database comprising PWT's and the Bank's PPP databases. The University of Pennsylvania and the World Bank have been working together to facilitate the integration process. Agreements have been reached between the two institutions to use common procedures for the aggregation of benchmark PPPs and estimation of regression-based figures. This has cleared the way for the integration of the two programmes. The transfer of PWT to the World Bank will be carried out by the middle of the year 2000.

IV. Year 2000 ICP survey and beyond

24. The most immediate and pressing challenges facing the international community are to decide, first, on how to proceed with the year 2000 round of global surveys and, second, on what must be done concurrently to resolve the longer-term questions of maintaining ICP. The year 2000 population censuses, which will provide a population benchmark for the next millennium, are in progress. The ICP round will be equally critical for establishing a corresponding economic benchmark.

A. Challenges, tasks and priorities

25. The year 2000 ICP round has begun in earnest in the OECD, Central and Eastern European, and Transcaucasian and Central Asian countries. Other regions that took part in the 1993 round are waiting to launch their regional programmes. Most importantly, there is considerable enthusiasm in many countries, including those that never took part in previous comparisons. It is worth noting that China, which has never participated in the full ICP survey, has expressed interest in joining the 2000 round. India, which has not participated in ICP since 1985, has indicated that it will join the upcoming round.

26. The international community should be encouraged by the growing interest in ICP and should build on the momentum it has helped create. The immediate challenges are:

(a) Establishing a global coordinating body under the auspices of the relevant intersecretariat working group;

(b) Forming a cost-sharing arrangement among international and regional agencies;

(c) Drawing up strategies and action plans to implement Mr. Ryten's recommendations.

27. As stressed in the Ryten report, the most critical challenge facing the international community is to establish a global coordinator with a mandate to plan, coordinate and manage the global programme. The work is too demanding for any one organization to undertake without the active participation and support of other partners in ICP. Extra efforts should be made to bring on board new partners both from international and from regional arenas. Prospective international partners such as UNDP, the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Children's Fund (UNICEF), which are all users of PPP data, should be encouraged to be

active partners and participate in a cost-sharing arrangement.

28. The long-term objective should be to bring ICP into the mainstream of international, regional and national data work. This, too, requires a comprehensive management plan and close cooperation among all parties. The challenges are:

(a) Incorporating ICP surveys into the regular programmes of national statistical offices as part of their work on national accounts and prices;

(b) Integrating ICP with international agencies' operational interest in capacity-building and knowledge management strategies;

(c) Developing more analytical and policy-making applications.

29. A broad-based approach to statistical capacity-building is essential both to mainstream ICP and to strengthen country-level price collection. Because capacity-building involves all aspects of statistical work including data collection, processing and dissemination, putting capacity-building at the centre of ICP work will help address many of the data-quality problems highlighted in the Ryten report.

30. The integration of ICP and CPI will require expanding the list of CPI prices and reducing the list of ICP prices to maximize the overlap between the two programmes. While recognizing the difficulties and limitations in respect of defining a core set of prices to be regularly collected, the international community should focus on the long-term benefits both for national and for international work. The integration process will of necessity be gradual in many regions of the world and would be conditional on progress achieved in basic national statistical infrastructure. A major issue that merits attention is how countries, faced with resource constraints, can maintain a balance between providing data that enhance international comparisons and being responsive to domestic CPI needs. The international community should, in the interest of capacity-building and developing comparable data, find the resources to help countries cover the additional cost that the expansion of the list of CPI prices entails. At the same time, countries should recognize that helping the international agencies compile this information will ultimately lead to a better and perhaps more efficient global development effort.

31. A holistic approach to capacity-building also requires developing more analytical and policy-making applications of the data. The resources invested in ICP can be justified only by the benefits that countries participating in it, and international organizations financially supporting it, derive from its outputs. Although ICP data are being used widely in academic, and increasingly in World Bank, United Nations and IMF research, they are not utilized for operational purposes. The European Commission is the only international body that puts ICP-based numbers to operational use. For the purpose of assisting its less prosperous members in catching up with their more prosperous partners, the community has established structural funds, including grants of a variety of types. The allocation of the bulk of the funds to less prosperous countries is made on the basis of PPP-based GDP per capita.

32. In the past, ICP's primary focus has been on data collection, processing and dissemination. Little effort went into publicizing the benefits of its outputs and even less into expanding the scope of their uses in country-relevant policy analysis. The programme's short-term survival and long-term success depend on its ability to achieve a shift in emphasis from the narrower objective of data collection, compilation and dissemination to a holistic objective that includes improving the use to which its outputs are put. In this context, ICP should lay particular emphasis on: (a) encouraging and facilitating interaction between data users and producers; and (b) identifying policy-relevant uses for the numbers and making them known to national Governments and international agencies.

B. Some practical developments

33. Insofar as there are resource limitations in all data compilation exercises, it will be necessary to give careful consideration not only to the sharing of tasks, but also to matters of sequencing and priorities. In this regard, the World Bank sees the need to start by developing a survey framework that can be used to pilot the integration work in one or two regions. CIS regional comparison work, which makes extensive use of CPI information for ICP, can be a good case study and can eventually serve as a pilot programme for other regions. As an administrator of the ICP Trust Fund created by IMF, World Bank and EBRD, the World Bank is helping to finance the year 2000 CIS

comparison, in the hope of developing a framework that will lay the groundwork for the integration of ICP with CPI programmes.

34. Another important dimension is the integration of detailed price data from ICP with detailed expenditure data from household budget surveys (HBS). The ultimate objective here should be to establish the greatest possible synergy between ICP and HBS. Characteristically, HBS provide detailed expenditure data, but the price data they generate are restricted in scope and coverage. ICP, on the other hand, provides detailed price statistics specified by regions and urban and rural areas, as well as by outlets, while maintaining cross-country comparability. The integration of ICP and HBS could potentially provide tremendous cross-benefits to each programme. To compute PPPs, ICP requires detailed subcategory expenditure weights that are normally available only from household expenditure surveys. On the other hand, the detailed data that ICP makes available provide a coherent basis for assessment of poverty and the impact of structural adjustment programmes, the primary concerns of Governments and international institutions. Again, the integration of the two programmes needs to be undertaken systematically with an overall plan for improving statistical capacity-building. Some work has been done at the World Bank to pilot this, but more research is needed.

35. Both the Ottawa Group on Price Indexes and the Intersecretariat Working Group on Price Statistics (ISWGPS) recognize the usefulness of the additional dimension ICP adds to price information and analysis. Eurostat has also been looking at ICP data in framing its work on harmonizing consumer price indices. Recently, at its Washington, D.C., meeting, the Expert Group on Capital Stock Statistics drew attention to the need to compile an annual inventory of certain capital goods prices corresponding to their respective investment goods values that could utilize the information compiled in ICP on machinery and equipment.

36. In light of the fact that one of the primary objectives of ISWGPS, as explained in its terms of reference, is "assisting in the development of a framework for price statistics which is able to explain the links between various price indices, and between price indices and other relevant economic and labour statistics", the Intersecretariat Working Group is best suited to moving the integration of CPI and ICP forward. At its thirty-first session, the Statistical Commission should discuss the viability of expanding the terms of reference of ISWGPS to include ICP in general, and the integration of ICP and CPI in particular.

V. Summary of recommendations

37. Important steps have been taken since the thirtieth session of the Statistical Commission, at which the Ryten report and its recommendations were discussed. These include: the forthcoming ICP global report and the accompanying ICP CD-ROM; the development of a new data-capture and data-processing software; a regional workshop in the CIS region; and the progress in respect of integrating the World Bank and University of Pennsylvania PWT databases. However, further work needs to be done. The immediate and pressing challenges facing the international community are to decide, first, on how to proceed with the year 2000 round of global surveys and, second, on what must be done concurrently to ensure the continuity and long-term viability of ICP.

38. There is considerable interest in many countries, including countries that have never taken part in ICP, in participating in the year 2000 round. The international community should work together to build on the momentum that it has helped create. In this regard, immediate challenges include establishing a global coordinating body, raising funds and drawing up strategies and action plans to start implementing the recommendations of the Ryten report. Taking full responsibility for the global coordination work would be too demanding and resource-intensive for any one organization. Therefore, close cooperation and cost-sharing arrangements need to be worked out among regional organizations, international agencies and other partners of ICP. An extra effort should also be made to bring on board new partners from both the international and the regional arenas.

39. The long-term objective should be to bring ICP into the mainstream of international, regional and national data work. This, too, would require a comprehensive management plan and close cooperation among national, regional and international statistical offices. The international community should take the initiative by incorporating ICP into the work programme of the relevant intersecretariat working group(s) and encourage countries to incorporate ICP

surveys into the regular programmes of national statistical offices as part of countries' statistical capacity-building.

40. It is equally important that efforts be made to effect a shift in ICP's emphasis from the narrower objective of data collection, compilation and dissemination to a holistic objective that includes enhancing the use to which its outputs are put. In this respect, ICP should lay particular emphasis on encouraging and facilitating interaction between data users and producers, and developing policy-relevant uses for the numbers.

Notes

[a] *Official Records of the Economic and Social Council, 1999, Supplement No. 4* (E/1999/24).

[b] Raimundo Fombellida and Seppo Varjonen, *External Evaluation of the International Comparison Programme, African Region: Phase VI* (Luxembourg, Eurostat, 1996).

[c] Ian Castles, *Review of the OECD-Eurostat PPP Program*, document STD/PPP(95)5 (Paris, OECD, 1997).